NOTE: Use the lenses separately for the first part of the telescope activity and then complete its construction.

BUILDING AN ASTRONOMICAL TELESCOPE

MATERIALS (included in kit)
- 2 cardboard tubes (one slightly smaller than the other)
- 1 foam lens holder
- 1 1/2 inch spacer
- 1 plastic cap
- 1 cardboard washer
- 1 large lens
- 1 small lens
(NOTE: To avoid scratching the lenses, place them on a piece of paper or cloth.)

PROCEDURE
Refer to Figure 1 for the following instructions.

![Diagram of telescope parts]  
Figure 1

1. Pick up the large lens, being careful not to smudge it with your fingers. Fit the curved side of the lens snugly against the front of the outer tube, making sure it is positioned perpendicular to and centered on the tube. Slip the plastic cap over this end of the tube so that the lens is firmly held in place.

2. Using the small piece of cloth or tissue to prevent smudging, push the small lens into the foam lens holder.

3. Slide the spacer into the foam holder such that it pushes against the flat part of the lens. Push the spacer into the holder just far enough so the end of the spacer is flat with the end of the foam holder.

4. With the curved side of the lens facing toward the large lens, slide the foam holder into the end of the smaller of the sliding tubes. The foam holder should be flat with the end of the tube.